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EXAMINER

TRINH, MINH N

ART UNIT

PAPER NUMBER

3729

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,507	<b>Applicant(s)</b> SCHILLER, GERHARD	
	<b>Examiner</b> Minh Trinh	<b>Art Unit</b> 3729	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) 34,35,37 and 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-33 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/15/10</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Applicant's election with traverse of species IA in the reply filed on 4/11/2011 is acknowledged. Applicant's arguments regarding the Office Restriction have been duly noted but are held to be non-persuasive. In addition to what was stated on page 2, paragraph 1 of the prior Office action the following rebuttal to Applicants' remarks is as follows.

The sections of the manual cited relate to restriction requirement for election of species, which is clearly covered in section 1850, in this invention, the groups inventions IA –IB do not related to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the groups lack the same or corresponding special technical features for the reasons: it has been determined a posteriori, i.e. after taking the prior art into consideration, that the features common to all the claims do not constitute "special technical features" since they do not make "a contribution" over the prior art in light of the Deutsches patent DE19738922 to Tutsch which teaches substantially every features which are common to all claims are as follows: first and second flat supports 1, 4 (see Figs. 3-4), camera device in line of an ejector 6 ( see Figs. 3-4), and many others. Since, **the common features as noted above are well known, therefore the restriction requirement is considered to be proper.** Further, once the claims are determined to be directed to mutually patentable inventions and the Office requires an election of species, a persuasive traverse is an admission on the record that applicant does not find the claimed species are patentable, one over the other. Having not done so, the reasons presented are not persuasive. The

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requirement is still deemed proper and is therefore made **FINAL**. Thus, Species IB is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species IB, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/11/11.

An Office action on the merits of elected species IA (claims 19-33 and 36) as follows:

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The abstract should be in a single paragraph and away from other text. Also the first support 1 is not agreed with wafer 1 of the specification. Appropriate correction is required.

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

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- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

It is also noted that the spec. discloses 1 as wafer (see page 12 list of references) rather than the first support as mention in the abstract.

### ***Drawings***

6. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings filed on 4/24/06 are not formal and not compliance w/ 37CFR 1.121(d). Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office

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action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “1” has been used to designate both wafer and first flat support. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed “a flat support element” (claim 19, lines 13); “a third positioning device”(claim 22); “evaluation device and control device” (claims 32-33)”, etc., must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

8. “A positioning apparatus, comprising: for transferring at least one electronic component from” (claim 19, lines 1-2) should be changed to:-- A positioning apparatus for transferring at least one electronic component comprising:--“.

### ***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-33 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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It is unclear as to what being referring as "a flat support element of the apparatus" (claim 19, line 13). Please be more specific. Note that the apparatus is being claimed and there is no connection between the above and the apparatus.

Whether or not "a support element" (claim 19, line 13) is a part of the claimed first flat support (claim 19, line 3). Please clarify.

"the camera devices" (claim 20, line 11) lacks antecedent basis. Further, claim 20 recites "its support plane. . . is calculated from: . . . of the second support" (lines 6-11) is not understood since the claims directed to an apparatus rather than the operation functions.

The scope of claims 26-27 is not clear because these claims do not further limit the claimed apparatus.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 19-33 and 36 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Tutsch (DE 19738922) in view of Yearsley (US patent 4,896,418).

Tutsch discloses the claimed positioning apparatus of the present invention comprising: a first flat support 4; a second flat support 1 which extends parallel to the



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first flat support 1, wherein the apparatus is configured for transferring at least one electronic component from the first flat support to at least one predetermined bond location on the second flat support, a camera device configured for detecting position data of the at least one predetermined bond location and of the at least one electronic components to be removed from the first flat support; and an ejection device 6 for removing the at least one electronic component from the first flat support by an ejection movement, wherein the camera device (on line w/ 6), a flat support element of the apparatus, the second flat support, the first flat support, and the ejection device, in this order, are arranged along a common straight line (see Figs 3-4 ). Further, regarding wherein the first flat support element is optically transparent, and wherein at least a portion of the second flat support is optically transparent to allow the camera device to make optical contact with both the at least one electronic component to be removed and the at least one predetermined bond position. The Yearsley discloses the use of transparent material for support stages (see col. 3, lines 39-43). Therefore, It would have been obvious to one having an ordinary skill in the art at the time of the invention was made to have utilized the Yearsley 's teaching as described above onto the invention of Tutsch in order to form a positioning device having the transparent supports for accurately positioning and aligning of the substrate component.

Additional to the above, regarding optically transparent materials for supports. It would have been an obvious matter of design choice to choose any desired materials including the above since applicant has not disclosed that such optically transparent materials for supports would solves any stated problem or is for any particular purpose

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and it appears that the invention would perform equally well with the type of materials as taught by the combination of Tutsch and Yearsley as indicated above.

As applied to claims 20-21, 36 (refer to Figs. 1-4 of Tutsch for the teaching of multi positioning device associated w/ the supports i.e., 5, 3, etc.,)

As applied to claims 23-30 are also satisfied as the above discussion (see Figs. 1-4 of the Tutsch for the associated element and the additional features of the claimed apparatus cited in these claims).

As applied to claim 31, refer to an up and down vertical arrow indicated in the left side of Fig. 2 .

As applied to claims 32-33 refer to Figs. 1-2, reference 7 and 10 for evaluation and controlling the apparatus and camera.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569.

The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mt  
5/4/11

/Minh Trinh/  
Primary Examiner, Art Unit 3729

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